

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

10 JUN 2005

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference CPGNA20480	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/CN02/00940	International filing date (day/month/year) 31.DEC.2002(31.12.02)	Priority date (day/month/year) 10.DEC.2002 (10.12.02)
International Patent Classification (IPC) or national classification and IPC IPC ⁷ C12Q1/68 C12Q1/70 C12P19/34		
Applicant TSINGHUA UNIVERSITY et al		
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>3</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>		
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>		

Date of submission of the demand 31.DEC 2002(31.12.2002)	Date of completion of this report 01.APR 2005 (01.04.2005)
Name and mailing address of the IPEA/ 6 Xitucheng Rd., Jimen Bridge, Haidian District, 100088 Beijing, China Facsimile No. 86-10-62019451	Authorized officer LILAN Telephone No. 86-10-62085067

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/CN02/00940

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☒ the international application as originally filed/furnished

- ☐ the description:

pages _____ as originally filed/furnished
pages * _____ received by this Authority on _____
pages * _____ received by this Authority on _____

- ☐ the claims:

pages _____ as originally filed/furnished
pages * _____ as amended (together with any statement) under Article 19
pages * _____ received by this Authority on _____
pages * _____ received by this Authority on _____

- ☐ the drawings:

pages _____ as originally filed/furnished
pages * _____ received by this Authority on _____
pages * _____ received by this Authority on _____

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/CN02/00940**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement:**

Novelty (N)	Claims 1-36	YES
	Claims	NO
Inventive step (IS)	Claims 1-36	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-36	YES
	Claims	NO

2. Citations and explanations (Rule 70.7)**Reference is made to the following documents:**

Document 1: WO, A1,0155438(UYCI-N) 02.AGU.2001(02.08.2001)

Document 2: WO, A1,0061803(NANO-N) 19.OCT.2000(19.10.2000)

Document 3: WO, A1, 9804745(BRAN-I, ZHAN-I, MOUN)05.FEB.1998(05.02.1998)

Document 4: CN,A, 1175282(GAME-N)04.MAR.1998(04.03.1998)

1. Novelty (Article 33(2)PCT)

The embodiments of claims 1-36 of the present invention are not the same as the prior art.
Claims 1-36 are novel under Article 33(2). PCT.

2. Inventive step (Article 33(3)PCT)

These claims 1-36 have inventive steps compared with the D1,D2,D3and D4, which would have been not obvious to one of ordinary skilled in the art.

Claims 1-36 of the present application have inventive steps, meet the requirement of Article 33(3) PCT.

3. Industrial applicability (Article 33(4)PCT)

The present processes and kits can be used for amplifying a nucleic acid of a target cell or virus, using inter alia, binding between a target cell, cellular organelle or virus with a magnetic microbead.

Therefore, claims 1-36 meet the criteria set out for industrial applicability in Article 33(4) PCT.